

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018604**Date Inspected:** 10-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

**OBG # TRIAL ASSEMBLY YARD (11EW-12AE)**

This QA Inspector along with QA inspector Mr.Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 11EE and segment 12AE. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11EE to Segment 12AE – PP 108 to PP 109

**OBG # TRIAL ASSEMBLY YARD (11AE-11BE)**

This QA Inspector witnessed the final bolt tension verification on the WT stiffeners of segment 11AE to 11BE. The torque wrench S/N was XO2-666.The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The panel point and bolt size designations were as follows:

PP 97 to PP 98:

M22 X 70 – DHGM 220038– 480 NM

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For additional information please reference the pictures below:

### OBG # TRIAL ASSEMBLY YARD (11BE-11CE)

This QA Inspector witnessed the final bolt tension verification on the WT stiffeners of segment 11BE to 11CE. The torque wrench S/N was XO2-666. The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The panel point and bolt size designations were as follows:

PP 100 to PP 101:

M22 X 70 – DHGM 220038– 480 NM

This QA Inspector randomly observed the following work in progress:

### OBG # TRIAL ASSEMBLY YARD (11EW-12AW)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 009 in the (2F) horizontal position on edge panel 'I' stiffener piece mark no. EP123-001. The location was the hold back of 'I' stiffener fillet weld of segment 11EW. The welder ID was 040656. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 005 in the (2F) horizontal position on edge panel 'I' stiffener piece mark no. EP3010-001. The location was the hold back of 'I' stiffener fillet weld of segment 12AW. The welder ID was 040656. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

### OBG # TRIAL ASSEMBLY YARD (11EE-12AE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 018 in the (4F) overhead position on deck panel 'I' stiffener piece mark no. DP708-001. The location was the hold back of 'I' stiffener fillet weld of segment 11EE. The welder ID was 050289. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-4114-1.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 017 in the (4F) overhead position on deck panel 'I' stiffener piece mark no. DP3001-001. The location was the hold back of 'I' stiffener fillet weld of segment 12AE. The welder ID was 050289. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-4114-1.

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### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Manikandan,Murugan	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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